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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/540,461   | 03/31/2000  | Charles J. Cohen     | CYB-05902/03        | 2113             |
| 25006  | 7590        | 12/02/2004           | EXAMINER            |                  |
| GIFFORD, KRASS, GROH, SPRINKLE<br>ANDERSON & CITKOWSKI, PC<br>280 N OLD WOODARD AVE<br>SUITE 400<br>BIRMINGHAM, MI 48009 |             |                      | VU, THANH T         |                  |
|  |             | ART UNIT             |                     | PAPER NUMBER     |
|  |             | 2174                 |                     |                  |
| DATE MAILED: 12/02/2004  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |              |  |
|------------------------------|-----------------|--------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |  |
|                              | 09/540,461      | COHEN ET AL. |  |
|                              | Examiner        | Art Unit     |  |
|                              | Thanh T. Vu     | 2174         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 7/23/04.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-21 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

This communication is responsive to Amendment, Filed 07/23/04.

Claims 1-21 are pending in this application. In the Amendment, claim 6 was amended. This action is made final.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 7-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claims 1-10 of Cohen et al. ("Cohen", U.S. Pat. No. 6,681,031) in view of Nguyen (U.S. Pat. No. 6,072,494).

Claim 1 of Patent No. 6,681,031 to Cohen et al. is exactly the same to Claim 1 of the application except for the limitations designating one or more predefined behaviors; comparing the identified gesture to one of the predefined behaviors; and in the event of a correlation between the gesture and the particular predefined behavior, determining that the behavior of the target includes the particular gesture. However, Nguyen teaches

designating one or more predefined behaviors (figs. 2 and 3; col. 2, lines 6-14); comparing the identified gesture to one of the predefined behaviors (figs 2 and 3; col. 2, lines 6-14 and lines 19-30; col. 7, lines 27-31); and in the event of a correlation between the gesture and the particular predefined behavior, determining that the behavior of the target includes the particular gesture (col. 5, lines 60-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Nguyen in the invention of Cohen because it provides a user a real-time gesture recognition system to perform any type of function that the computer was programmed to do upon recognition of the gesture.

The dependent claims correspond as follows:

|                 |   |   |   |   |    |    |    |
|-----------------|---|---|---|---|----|----|----|
| The application | 2 | 4 | 7 | 9 | 10 | 12 | 13 |
|-----------------|---|---|---|---|----|----|----|

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|              |   |   |    |   |   |   |   |
|--------------|---|---|----|---|---|---|---|
| Cohen et al. | 2 | 2 | 10 | 3 | 4 | 5 | 6 |
|--------------|---|---|----|---|---|---|---|

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|                 |    |    |
|-----------------|----|----|
| The application | 15 | 16 |
|-----------------|----|----|

|              |   |   |
|--------------|---|---|
| Cohen et al. | 8 | 9 |
|--------------|---|---|

Claim 3, Nguyen teaches the method of claim 1, wherein the target is a group of people (col. 3, lines 15-21; It is inherent that a dynamic background might has more than one persons in it).

Claim 8, Nguyen teaches the method of claim 1, wherein the step of analyzing the gesture-making target includes imaging the target (fig. 2; col. 5, lines 48-51).

Claim 11, Nguyen teaches the method of claim 1, further including the steps of: receiving a file of recognized gestures along with their vector descriptions; and comparing the outputs of the gesture recognition modules to the vector descriptions (col. 7, lines 27-31).

Claims 5 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claim 1 of Cohen et al. (“Cohen”, U.S. Pat. No. 6,681,031) in view of Nguyen (U.S. Pat. No. 6,072,494) and Freeman (U.S. Pat. No. 5,454,043).

Claim 5, Cohen and Nguyen teach the method of claim 1 as described above, but does not teach gesture-recognition modules output information relating to static and invention to include the teaching of Freeman in the invention of Cohen and Nguyen in order to provide static and dynamic hand gestures which give more flexibility for convenient computer control.

Claim 6, Freeman teaches the method of claim 5, further including the steps of: deriving the start position of the target, the end position of the target, and the velocity between the start and end positions (col. 3, lines 40-60); comparing the velocity of the target to a threshold value, and identifying the gesture as a static gesture if the velocity is below the threshold value, otherwise, identifying the gesture as a dynamic gesture (col. 3, lines 31-38; col. 4, lines 25-30; col. 4, lines 50-56).

Claims 19-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claim 1 of Cohen et al. (“Cohen”, U.S. Pat.

No. 6,681,031) in view of Nguyen (U.S. Pat. No. 6,072,494) and Qiao et al. ("Qiao", U.S. Pat. No. 6,075,895). The modified Cohen teaches the method of claim 1 as described above, but does not teach the target includes a robot, a weapon, or a vehicle. However, Quiao teaches the target includes a robot, a weapon, or a vehicle (col. 12, lines 23 –30; col. 12, lines 44-48; col. 1, lines 10-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include gesture-making targets as taught by Quiao in the modified invention of Cohen in order to provide various gesture-making targets which give more flexibility of computer control.

***Allowable Subject Matter***

Claims 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments in the Amendment have been fully considered but are not persuasive.

Applicant's primary argument is that Cohen is not a proper prior art. However, the examiner is not using Cohen as a prior art. Rather, Cohen is used under a double patenting rejection.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The examiner can normally be reached on Mon-Thur and every other Fri 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Vu  
11/29/2004

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